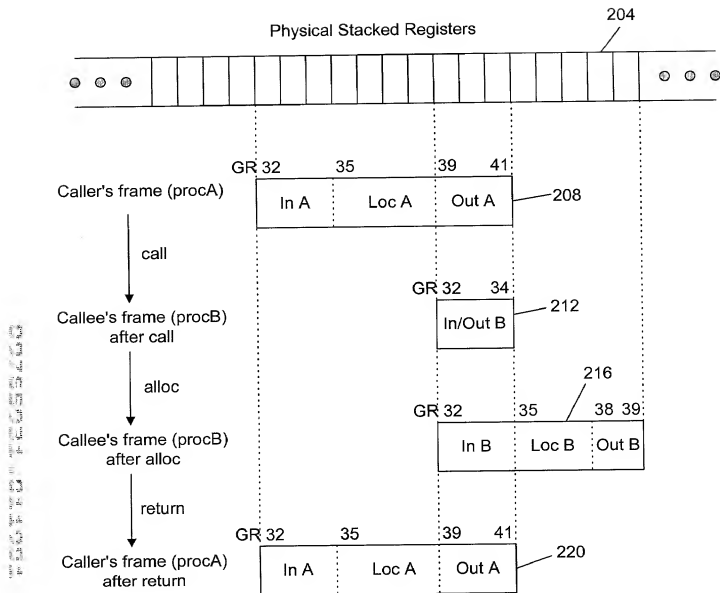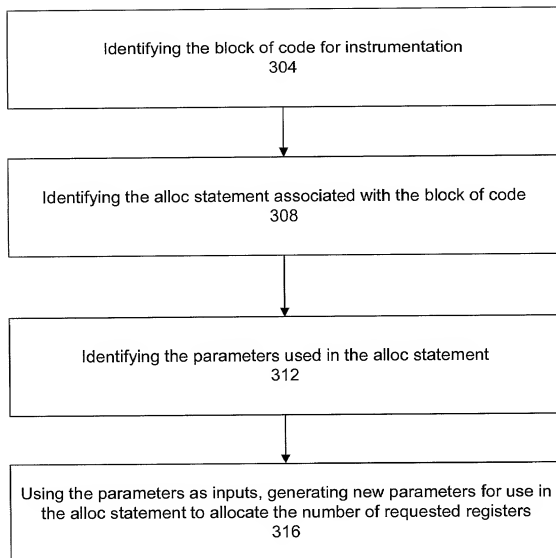| Statement	Input	Local	Output
1	alloc (..., 3, 5, 2, ...)	GR32, GR33, GR34	GR35, GR36, GR37 GR38, GR39	GR40, GR41
2	alloc (..., 2, 4, 1, ...)	GR32, GR33,	GR34, GR35, GR36 GR37	GR38

FIG. 1

FIG. 2

Identifying the block of code for instrumentation
304

Identifying the alloc statement associated with the block of code
308

Identifying the parameters used in the alloc statement
312

Using the parameters as inputs, generating new parameters for use in
the alloc statement to allocate the number of requested registers
316

FIG. 3

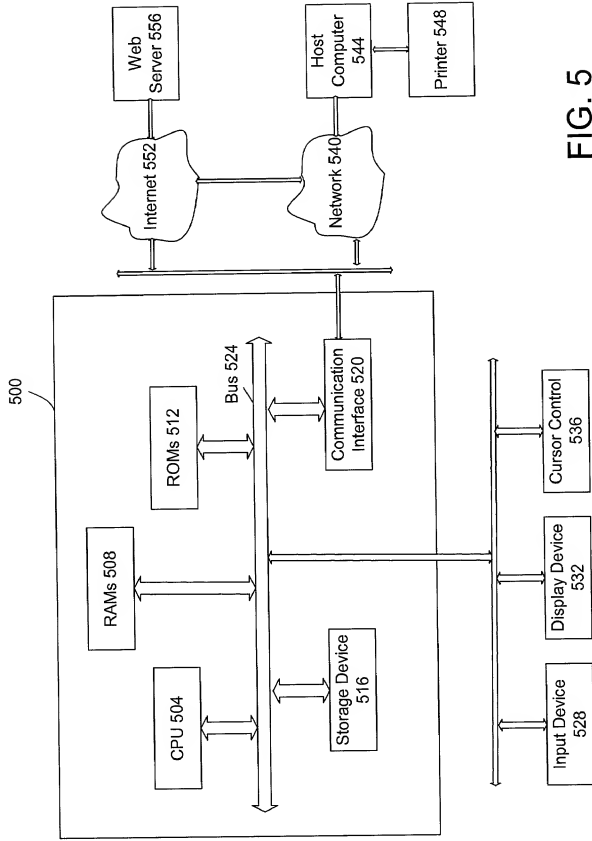| Statement	Input	Local	Output
1 alloc (..., 3, 5, 2, ...)	GR32, GR33, GR34	GR35, GR36, GR37 GR38, GR39	GR40, GR41
2 alloc (..., 3, 5, 6, ...)	GR32, GR33, GR34	GR35, GR36, GR37 GR38, GR39	GR40, GR41, RG42 GR43, GR44, GR45

FIG. 4

FIG. 5